

Tilting at Windmills

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The Economics of Wind Power

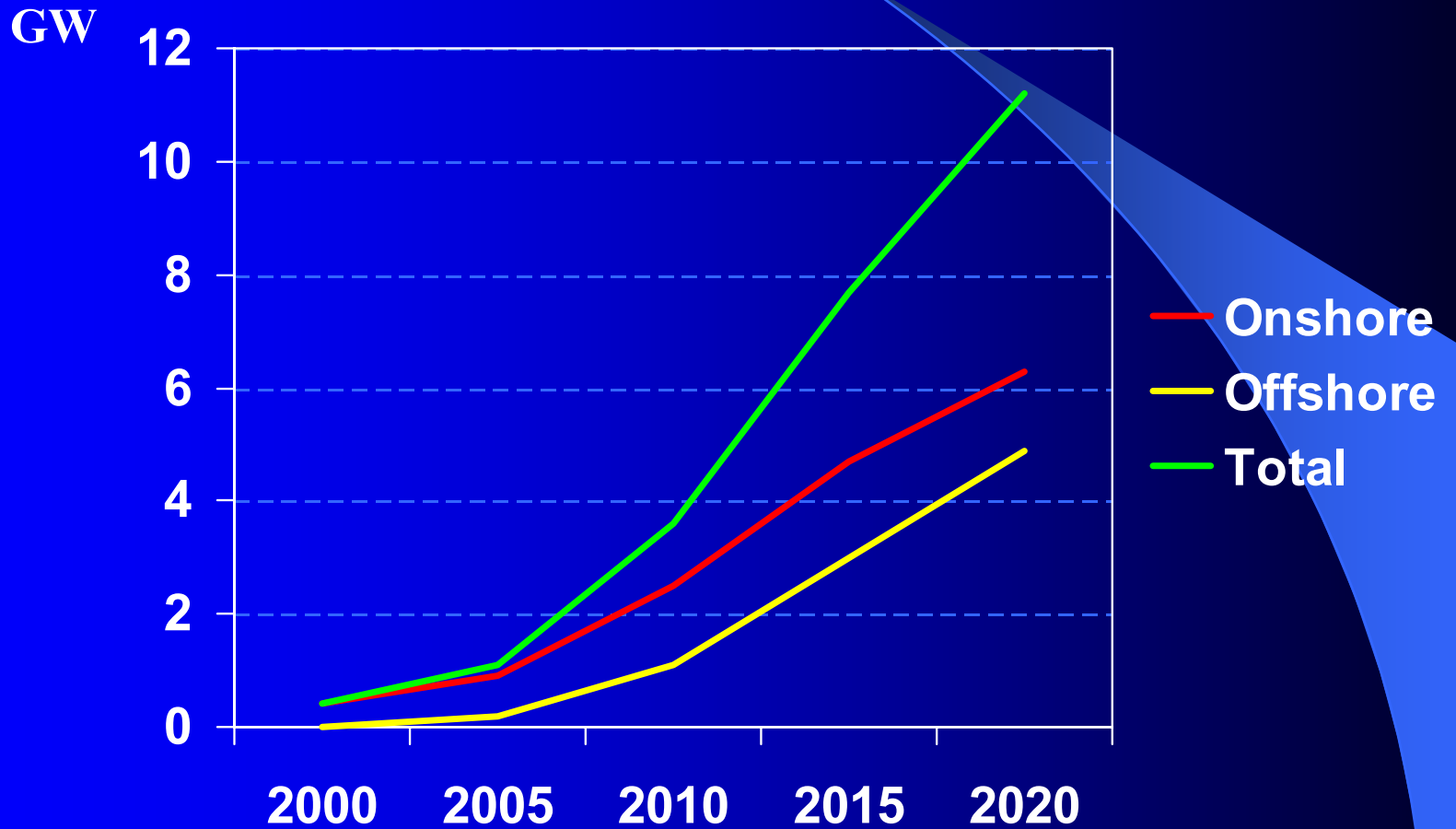




Outline

- The growth of Wind Power
- Prices and subsidies
- Where is the money coming from?
- Why is the Government promoting wind?
- How can we reduce CO₂ emissions?
- The future for Wind Power

Installed Capacity



Prices and Subsidies

	£/MWh
● Wholesale Price	22.00
● ROC	45.00
● CCL Exemption	4.30
● TOTAL	71.30

Energy Features

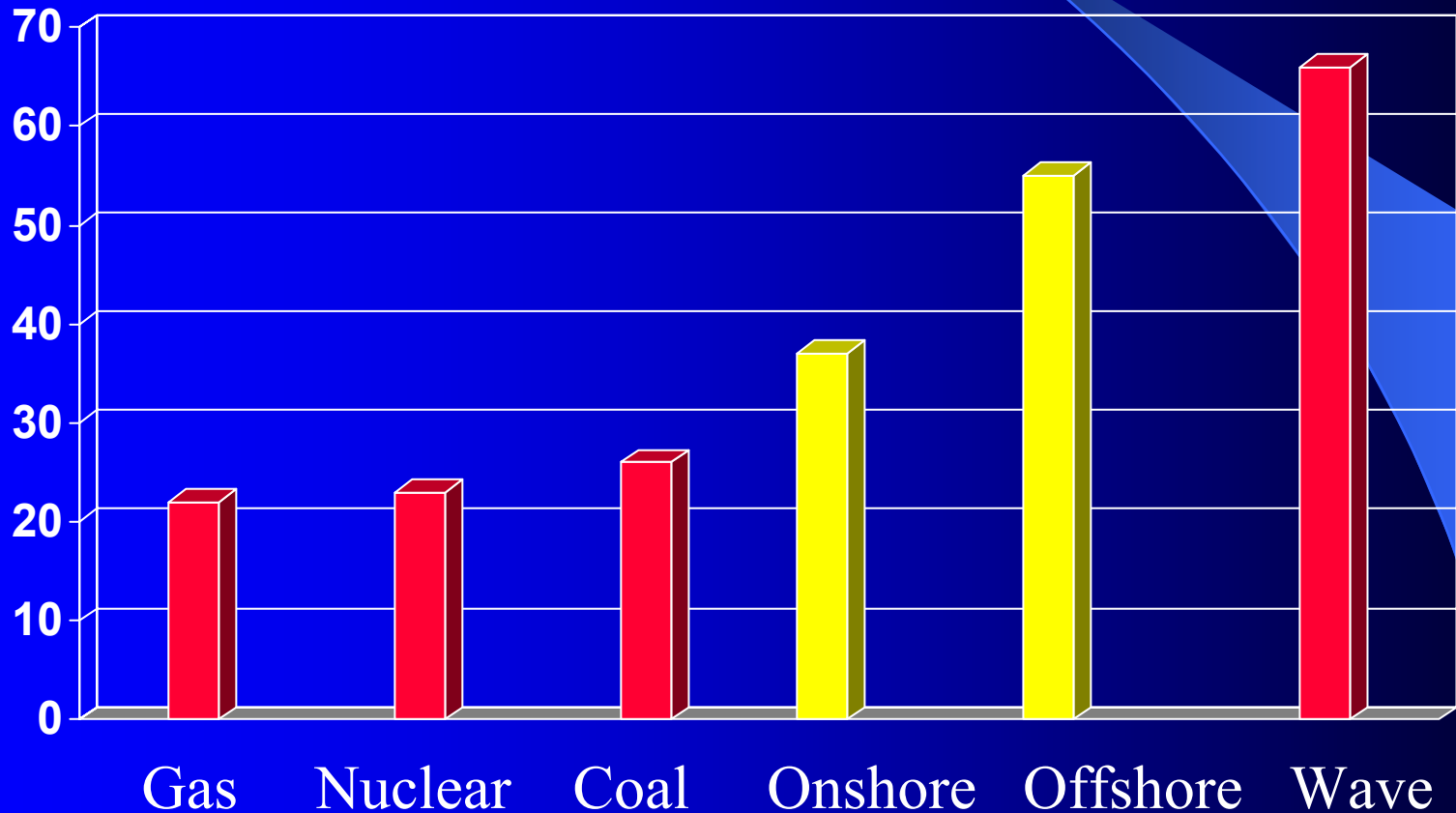
➤ Cheap

➤ Reliable

➤ Sustainable

Unit Costs of Generation

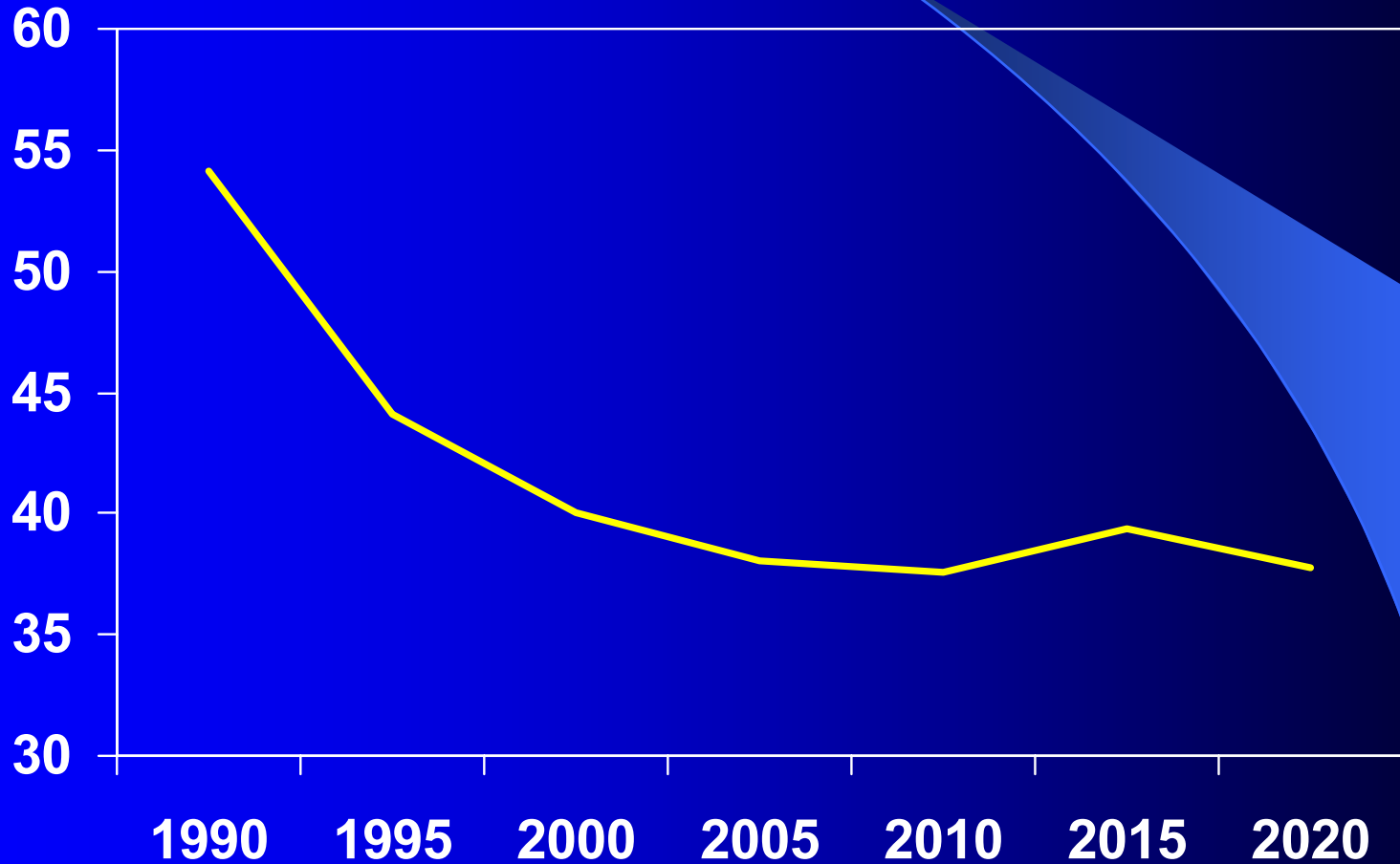
£/MWh



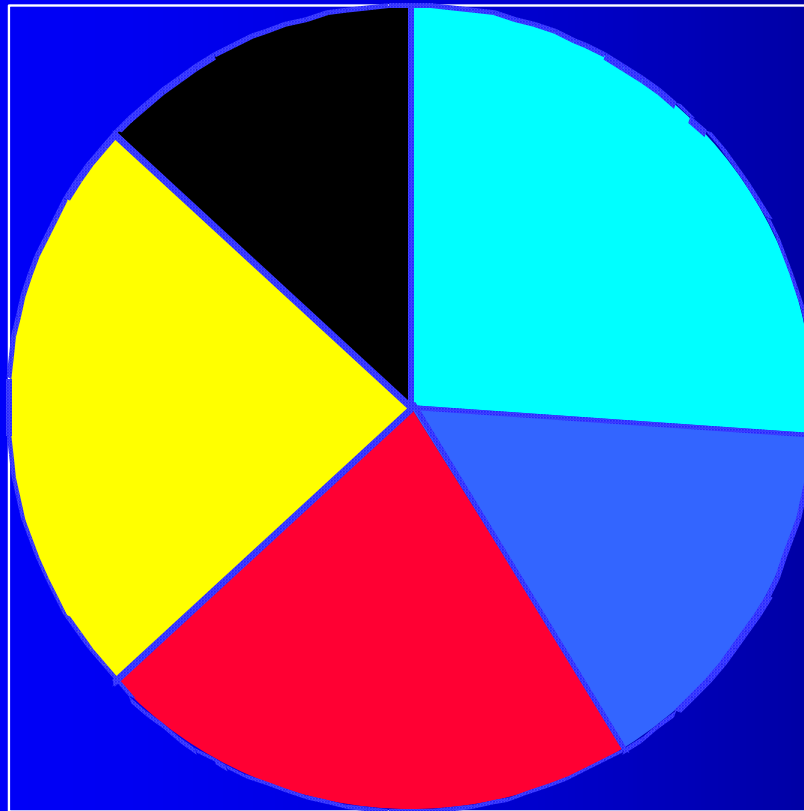
Intermittency

- Load Factor 25-35%
- Unpredictability

CO₂ Power Station Emissions

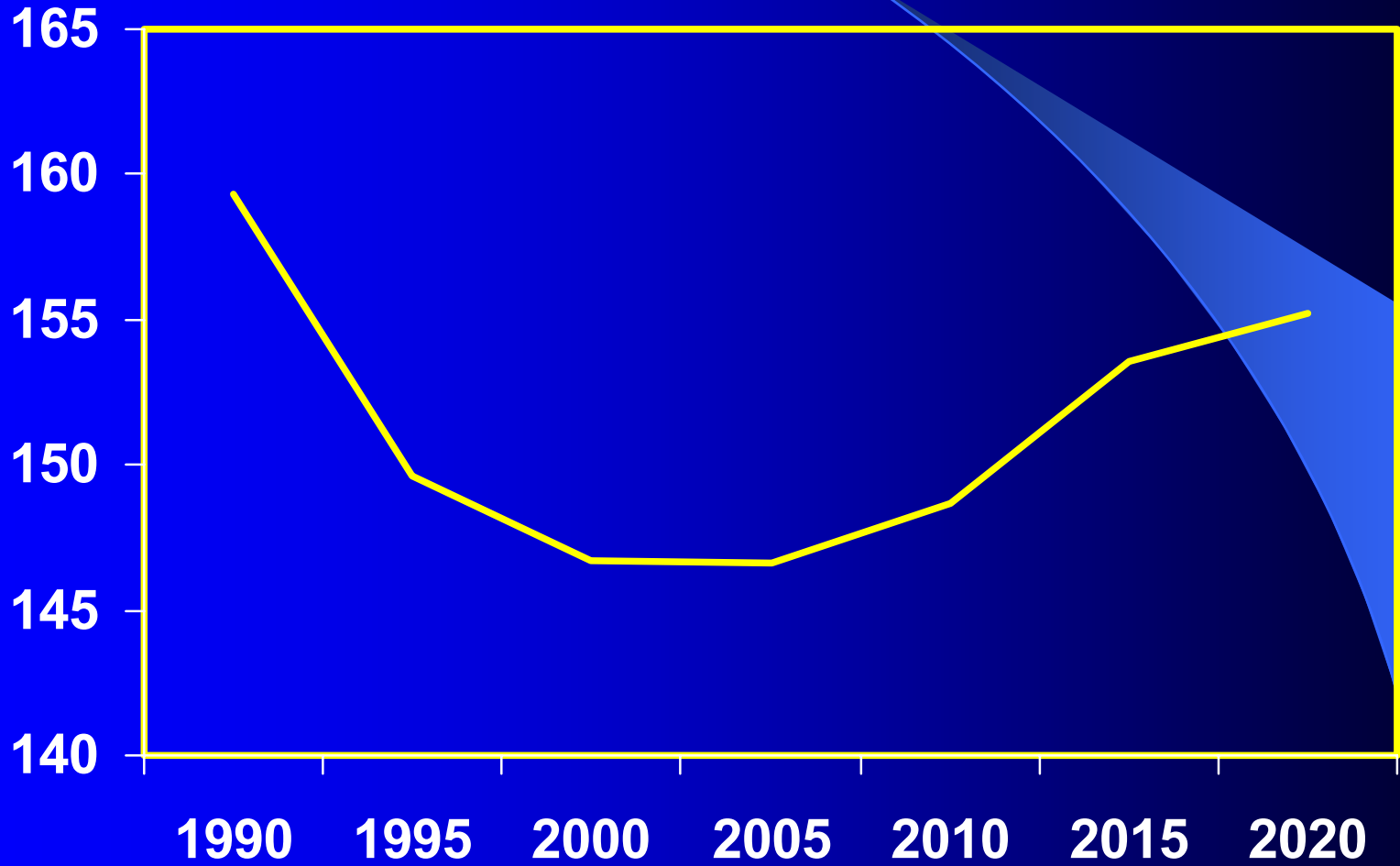


CO₂ Emissions by Sector



- Power Stations
- Households
- Industry
- Road Transport
- Other

Overall Emissions



How to Reduce CO₂ Emissions

- Prices should reflect costs of pollution
- Reduce energy consumption
- Reduce carbon intensity of energy

The Future for Wind Power

- Development of a cost effective method of storing energy
- Some windfarms profitable
- Benefits for local communities